Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Spring 2019 Levee Inspection Results

Reclamation District No. 2096 Wetherbee Lake

Summer **

Spring

Fall

	(March - May)	(June - August)	(September - November)	(December - February)				
† Overall LMA Rating (Fall Only)								
	** Non-receipt of Summ Reports may effect o							
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not deterr d using the same crite			ual maintenance				
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.								
Comments								

Unit Cover Sheet

Spring 2019 Levee Inspection Results

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Right	0.16

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/1/2019 - 5/1/2019			
DWR Inspector	Alberto De Leon			
Accompanied By	Randy Barker RD 2096			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

11100		Rating **	Λ	Issue No.		1	
LM Start		Rating	Α	issue ivo.		1	
LM End		Issue Type +	Ma	Location *		N/A	
Category Earthen Levee			GPS La	atituc	de/Longitude		
Category				Start		End	
ltom	Item Operations & Maintenance Manuals				0		0
пеш					0		0
DWR ID DWR_RD2096_01_s _ 2013_1							
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
O&M Manual is at the LMA's office.							

No Photos

LM Start		Rating **	Α	Issue No.		2		
LM End		Issue Type +	Ma	Location *		N/A		
Category Earthen Levee				GPS Latitude/Longitude				
Category	Sategory				End			
Item	Emergency Supplies &				0		0	
item	Equipmer	nt			0		0	
DWR ID	DWR_RD2	096_01_s _ 201	3_2					
		Comn	nent Cod	de				

No Photos

Inspector Comment Emergency supplies available.

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *	N/A		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
ltono	Flood Preparedness & Training				0		0
ltem '				0		0	
DWR ID	DWR_RD2	096_01_s _ 201	3_4				
Comment Code							

No Photos

Inspector Comment

LMA has a flood response plan in the office. It is recommended that the LMA and interested local volunteers take a flood fight training class in order to refresh their flood fight skills and methods.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.02	Rating **	A/W	Issue No.		14
LM End	0.02	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory	Calegory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.77385	2°	37.773852°
item				-121.29841	3°	-121.298413 °
DWR ID	22737					

Comment Code Inspector Comment

FS_ID:21505 DS_ID:22737 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 1 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M

Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013

LM Start	0.02	Rating **	A/W	Issue No.	14 (cont)
LM End	0.02	Issue Type +	Ma	Location *	



WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Photo 2 of 3: UCIP_SP_2019_21505_36448.jpg



WS view: three air vents for three drainage pipes on levee shoulder.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.02	Rating **	A/W	Issue No.		14 (cont)
LM End	0.02	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.77385	2 °	37.773852°
nem		-121.29841	3°	-121.298413°		
DWR ID	22737					

Inspector Comment

Comment Code

FS_ID:21505 DS_ID:22737 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 1 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M

Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013



LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.02	Rating **	A/W	Issue No.		15
LM End	0.02	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	37.77383	35 °	37.773835 °
пеш				-121.2984 ⁻	19°	-121.298419 °
DWR ID	22740					

Inspector Comment

Comment Code

FS_ID:21507 DS_ID:22740 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 2 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013

LM Start	0.02	Rating **	A/W	Issue No.	15 (cont)
LM End	0.02	Issue Type +	Ma	Location *	



WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Photo 2 of 3: UCIP_SP_2019_21507_36455.jpg



WS view: three air vents for three drainage pipes on levee shoulder.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.02	Rating **	A/W	Issue No.		15 (cont)
LM End	0.02	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.77383	5 °	37.773835°
пеш				-121.29841	9°	-121.298419°
DWR ID	22740					

Inspector Comment

Comment Code

FS_ID:21507 DS_ID:22740 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 2 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M

Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013



LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.03	Rating **	A/W	Issue No.		16
LM End	0.03	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.77381	8 °	37.773818°
пеш				-121.29842	3°	-121.298423 °
DWR ID	22739					

Inspector Comment

Comment Code

FS_ID:21508 DS_ID:22739 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 3 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013

LM Start	0.03	Rating **	A/W	Issue No.	16 (cont)
LM End	0.03	Issue Type +	Ma	Location *	



WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Photo 2 of 3: UCIP_SP_2019_21508_36460.jpg



WS view: three air vents for three drainage pipes on levee shoulder.

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.03	Rating **	A/W	Issue No.		16 (cont)
LM End	0.03	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.77381	8 °	37.773818°
item	item			-121.29842	3°	-121.298423°
DWR ID	22739					·

Comment Code

Inspector Comment

FS_ID:21508 DS_ID:22739 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south

FIELD_STRUCT_DESC: 3 of 3: 36-inch drainage discharge pipe of an unknown material through the levee, 3.5 feet below the crown. One concrete cutoff wall. Automatic pumping plant and concrete sump on the landside (LS). Vent pipes on the waterside (WS) shoulder. Concrete headwall and spill box on the WS. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.03)].

FS Date: 9/10/2013



LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

LM Start	0.03	Rating **	М	Issue No.		17
LM End	0.03	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Category	Category					End
Item	DWR UC	IP Field Study	,	37.77380	00°	37.773800°
пеш				-121.29842	28°	-121.298428 °
DWR ID	24666					

Inspector Comment

Comment Code

FS_ID:21506 DS_ID:24666 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - more information needs to be find from LMA/DWR Inspector for this crossing. - needs to find whether this pipe passes

FIELD_STRUCT_DESC: 4-inch steel pipe of an unknown purpose through the levee and to the pump platform, 3 feet below the crown. It is an element of the pumping plant. Field study discovered utility crossing.

FS Date: 9/10/2013

Photo 1 of 2: UCIP_SP_2019_21506_36453.jpg



LS view: 4-inch steel pipe (right) through the levee and to pump platform.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.03	Rating **	М	Issue No.		17 (cont)			
LM End	0.03	Issue Type +	En	Location *					
Category	ental	GPS Latitude/Longitude							
Calegory				Start		End			
Item	DWR UC	IP Field Study		37.77380	°	37.773800 °			
пеш				-121.29842	3°	-121.298428 °			
DWR ID	VR ID 24666								
	Comment Code								

Inspector Comment

FS_ID:21506 DS_ID:24666 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - more information needs to be find from LMA/DWR Inspector for this crossing. - needs to find whether this pipe passes

through the levee.

FIELD_STRUCT_DESC: 4-inch steel pipe of an unknown purpose through the levee and to the pump platform, 3 feet below the crown. It is an element of the pumping plant. Field study discovered utility crossing. FS Date: 9/10/2013



LS view: closer view of 4-inch steel pipe (left) through the levee and to pump platform.

LM Start	0.06	Rating **	Α	Issue No.		12
LM End	0.16	Issue Type +	Ма	Location *		WS
Category	evee	GPS La	atitud	le/Longitude		
Calegory						End
Item	Vegetatio	n		37.7733	80°	37.771824°
пеш				-121.2987	04°	-121.298403 °
DWR ID DWR_RD2096_01_s _ 2019_12						

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is well maintained.

Photo 1 of 1: SP_2019_RD2096_117_12_20190514_00018.jpg



Typical view of vegetation on waterside slope. (Spring 2019)

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.06	Rating **	Α	Issue No.		10	
LM End	0.16	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Vegetatio	n		37.77337	75 °	37.771824	
пеш				-121.29872	21 °	-121.298403 °	
DWR ID	DWR_RD2	096_01_s _ 201	9_10				

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is well maintained.

Photo 1 of 1: SP_2019_RD2096_117_10_20190514_00019.jpg



Typical view of vegetation on landside slope. (Spring 2019)

LM Start	0.06	Rating **	N	Issue No.		9	
LM End	0.06	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.7733	48°	37.773348°	
пеш				-121.2984	75 °	-121.298475 °	
DWR ID	DWR ID DWR_RD2096_01_s _ 2014_9						

Comment Code

T5: Tree stumps.

Inspector Comment

There is a pine tree stump at the levee toe.

Photo 1 of 1: SP_2019_RD2096_117_9_20190313_00002.jpg



View of the tree stump at the landside levee toe.

LM Start	0.08	Rating **	М	Issue No.	13		
LM End	0.08	Issue Type +	En	Location *	LS		
Category	Earthen Levee					e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		37.77302	21 °	37.773021	0
Item				-121.29843	80 °	-121.298430	0
DWR ID	DWR_RD2	096_01_s _ 201	4_13				

Comment Code

RW : Retaining Wall

Inspector Comment

There is an approximate 1 foot by 50 feet retaining wall at the levee toe with irrigation and landscaping.

Photo 1 of 1: SP_2019_RD2096_117_13_20190313_00006.jpg



View of the retaining wall at the landside levee toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.09	Rating **	A/W	Issue No.		6
LM End	0.09	Issue Type +	Ma	Location *		LS
Category	Earthen Levee				atitud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		37.7728	91 °	37.772891
пеш			-121.2984	54°	-121.298454 °	
DWR ID DWR_RD2096_01_s _ 2016_6						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

The LMA has an effective rodent control program. Monitor this location for possible future activity.



View of the previously rodent infested area on the landside levee slope.

LM Start	0.12	Rating **	М	Issue No.		11
LM End	0.12	Issue Type +	Ma	Location *		WS
Category	Earthen Levee				atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		37.7724	34°	37.772434°
пеш				-121.2984	33 °	-121.298433 °
DWR ID	DWR RD2	096 01 s 201	5 11			

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

The LMA restricted access but still a regrade and re-compaction of the damaged waterside levee slope is required.

LM Start	0.12	Rating **	М	Issue No.	11 (cont)
LMCnd	0.12	Issue Type +	Ma	Location *	\/\C

Photo 1 of 3: SP_2019_RD2096_117_11_20190313_00003.jpg



View of the material placed to prevent vehicles from driving around the gate.

Photo 2 of 3: SP_2019_RD2096_117_11_20190313_00004.jpg



Another view of the material placed to prevent vehicles from driving around the gate. Looking downstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2019

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	05/01/2019 05/01/2019	Alberto De Leon

LM Start	0.12	Rating **	М	Issue No.	11 (cont)		
LM End	0.12	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Stability			37.77243	4 °	37.772434 °	
item				-121.29843	3°	-121.298433 °	
DWR ID	DWR_RD2096_01_s _ 2015_11						
Comment Code							

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

The LMA restricted access but still a regrade and re-compaction of the damaged waterside levee slope is required.

Photo 3 of 3: SP_2019_RD2096_117_11_20190313_00005.jpg



View of the waterside slope damaged by vehicles.